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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/039,072	03/13/1998	ATSUSHI SASAKI	P/1878-109	9140

7590 01/29/2004

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EXAMINER

GRIER, LAURA A

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/039,072

Applicant(s)

SASAKI, ATSUSHI

Examiner

Laura A Grier

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,8 and 10 is/are rejected.
- 7) ☒ Claim(s) 2-3, 5, 7, and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 4, 6, 8, and 10** are rejected under 35 U.S.C. 102(b) as being anticipated by Iwamura.

Regarding **claim 1**, Iwamura discloses an apparatus for controlling acoustical transfer characteristics. Iwamura disclosure (figure 14) comprises surround sound loudspeakers (col. 14, lines 34-42) at outputs 17 and 18, which indicates a loudspeaker; a microphone for taking in an audio input signal output from the loudspeakers (col. 10, lines 54-56 and reference 11), which reads on a microphone for picking up sound regenerated and/or reproduced from the loudspeaker; a surrounding sound processor (14) or DSP for comparing in real time, (col. 11, lines 9-13), a direct input signal from the microphone with the signal received from an audio input signal (references 19 and 20), which provides inherent support of a sound source, in respect to reverberation characteristics (col., lines 52-68), wherein Iwamura further discloses that sound characteristics or decision data factors including, other characteristics such as frequency, thus supporting sound characteristics including frequency and reverberation (col. 2, lines 8-16) - wherein, when a change is made in the signal in respect to the feedback signal output by the microphone for correction of the audio signal in respect to reverb and frequency, a difference is generated; including delay circuits (D1 and D2), and improving the reproduced sound output by the sound source, which reads on a corrected signal, and further the sound signal(s) is output to

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an expansion circuit inherently amplifies (amplifier), since a smaller range input signal is converted to a larger output signal range (figure 14).

Regarding **claims 4, 6, and 8**, Iwamura discloses everything claimed as applied above (see claim 1). Iwamura further discloses an arithmetic section for the performing calculations for providing an improved control value based on decision characteristic factors such as frequency and reverberation (col. 1, lines 60-68 and col. 2, lines 1-7), which reads on a learned result and/or a comparison result.

Regarding **claim 10**, Iwamura discloses an apparatus for controlling acoustical transfer characteristics. Iwamura disclosure (figure 14) comprises surround sound loudspeakers (col. 14, lines 34-42) at outputs 17 and 18, which indicates a loudspeaker; a microphone for taking in an audio input signal output from the loudspeakers (col. 10, lines 54-56 and reference 11), which reads on a microphone for picking up sound regenerated and/or reproduced from the loudspeaker; a surrounding sound processor (14) or DSP for comparing in real time, (col. 11, lines 9-13), a direct input signal from the microphone with the signal received from an audio input signal (references 19 and 20), which provides inherent support of a sound source, in respect to reverberation characteristics (col. 10, lines 52-68), wherein Iwamura further discloses that sound characteristics or decision data factors including, other characteristics such as frequency, thus supporting sound characteristics including frequency and reverberation (col. 2, lines 8-16), including delay circuits (D1 and D2), and improving the reproduced sound output by the sound source, which reads on a corrected signal, and further the sound signal(s) is output to an expansion circuit inherently amplifies (amplifier), since a smaller range input signal is converted to a larger output signal range (figure 14).

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3. **Claims 2-3, 5, 7, and 9** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 7/15/03 have been fully considered but they are not persuasive.

The applicant basically argues that the prior art of reference, Iwamura, fails to disclose the every limitation claimed in lieu of the fact that Iwamura may use some characteristics of the audio signal that are stored in a memory for correcting the output of the loudspeaker, thus arguing that a comparison is not made between the sound source and the microphone. Iwamura does used audio data of the audio signal stored in memory for making a comparison being the sound source and the microphone output, and also, Iwamura further indicates the data from the memory is not used during a real time control of the acoustic system, which is interpreted to be in the same manner as the concept of the invention (col. 11. lines 1-13). Further the claim (claims 1 and 10) language does not restrict the use of the source characteristic being stored in a memory for correcting the loudspeaker audio output characteristics. Thus, the Iwamura rejection is maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

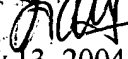
(703) 872-9314 (for Technology Center 2600 only)

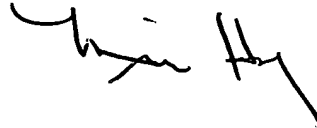
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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG 
January 13, 2004



MINSUN OH HARVEY
PRIMARY EXAMINER